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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/001,937

10/25/2001

Christopher R. Ralph

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8882

7590

03/05/2003

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EXAMINER

RAMANA, ANURADHA

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 03/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K.

Office Action Summary

Application No.

10/001,937

Applicant(s)

RALPH ET AL.

Examiner

Anu Ramana

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/25/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 6, 7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scribner et al. (US 6,241,734) in view of Lubeck et al. (US 5,100,390).

Scribner et al. disclose an apparatus for treatment of bone conditions (col. 1, lines 65-67 and col. 2, lines 1-10). The apparatus has a cannula 30 with a circumferential end opening to accommodate the passage of a flexible tube 78 with a distal end carrying an expandable structure (col. 1, lines 67-68, col. 2, lines 1-3, col. 5, lines 44-53, col. 6, lines 41-55 and col. 8, lines 27-53).

Scribner et al. do not disclose that the circumferential opening is in a side wall of cannula 30.

Lubeck et al. teach a cannula 9 with a solid closed tip 6 having a side opening 6' (col 5, lines 61-68 and col. 6, lines 4-6) to minimize trauma to penetrated tissues (col. 2, lines 58-68 and col. 3, lines 1-2) wherein side opening 6' is sized to receive a catheter or a "tubular expandable structure."

Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a cannula with a side opening 6 and a solid closed tip 6 in the apparatus of Scribner et al. to minimize trauma to penetrated tissues as taught by Lubeck et al.

Regarding claims 2, 5 and 6, insertion of a guide pin through the bore of a cannula is well known for surgical procedures such as reattachment of separated tissue.

Accordingly it would have been obvious to one of ordinary skill in the art have provided an opening in the distal end of the cannula of the Scribner et al.-Lubeck et al. apparatus for accommodation of a guide pin inserted therethrough for surgical procedures such as reattachment of separated tissue.

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Regarding claim 9, the use of radiopaque marker bands or segments to aid in the positioning of tubular structures such as catheters is well known. Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided radiopaque marker bands on the flexible expandable tube 78 of the Scribner et al.-Lubeck et al. apparatus.

The method steps of claims 10-14 would be performed during normal use of the Scribner et al.-Lubeck et al. apparatus.

Claims 3, 4, 5, 8, 9 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scribner et al. in view of Lubeck et al. further in view of Stark (US 5,456,267).

Scribner et al. do not disclose a surface on a distal end of the cannula to anchor the distal end in the bone.

Stark teaches bone-engaging structures such as at least one tooth or a plurality of teeth on the distal end of a cannula 60 to engage a bone surface 154 (col. 2, lines 22-24 and col. 6, lines 16-18).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided bone-engaging structures such as at least one tooth or a plurality of teeth on the distal end of the Scribner et al.-Lubeck et al. device for engaging a bone surface as taught by Stark.

Regarding claim 9, the use of radiopaque marker bands or segments to aid in the positioning of tubular structures such as catheters is well known. Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided radiopaque marker bands on the flexible expandable tube 78 of the Scribner et al.-Lubeck et al.-Stark apparatus.

The method steps of claims 10-14 would be performed during normal use of the Scribner et al.-Lubeck et al.-Stark apparatus.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Allen et al. (US 5,467,786): col. 3, lines 66-67 and col. 4, lines 1-15.


Lange et al. (US 6,036,682): Figure 4 and col. 1, lines 13-21.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (703) 306-4035. The examiner can normally be reached Monday through Friday between 8:30 am and 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at (703) 308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-2708 for regular communications and (703) 308-2708 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

AR
February 25, 2003


PEDRO PHILOGENE
PRIMARY EXAMINER